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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/377,402	AKIFUJI ET AL.
	Examiner	Art Unit
	Rebecca M Bachner	3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _25 February 2003_ .

2a) ☐ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1,2,4-6 and 8_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-2, 4-6,and 8-2_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

Detailed Action

1.   This is a Final Office Action in response to the amendments sent February 4,

2003. Claims 1-2, 4-6, and 8-20 are pending.

Response to Amendments

2.   The applicants amendments and arguments have been considered. The 35 USC

103 rejections remain for claim 1-2, 4-6, and 8-2

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-2, 4-6, 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Flores et al. (P.N. 6,073,109) in view of Reid et al (P.N. 5,892,449).

(Twice Amended) As per claim 1, Flores et al. disclose a workflow control method in a

workflow system connected to a plurality of client computers for carrying out business

procedures comprising a plurality of related business processes (see column 110, lines

26-33), at least one of the business procedures being allowed to execute some of the

related business processes simultaneously (see column 2, line 33-62, and figure 1, the

parallel workflows allow the business procedures to be executed simultaneously), said

workflow control method is comprising the steps of:

previously defining status changes to be detected in related business processes

which are allowed to be executed simultaneously with each other by said client

computers (see column 2, lines 33-62, and column 4, lines 57-63, the status changes

are detected by the business processes using triggered actions, a plurality of the

business processes can be executed simultaneously with the parallel workflows);

selecting at least one user who is in charge of a business process

interdependent to the business process in which the status change was detected (see

column 4, lines 30-34, the observer is informed, or detects, the acts of the workflow,

these workflow acts include status changes); and

notifying a client computer corresponding to a selected user of the occurrence of

a status change in the related business process (see column 4, lines 30-34, an observer

is informed, or notified, of all acts occurring in the business process, also see column

13, lines 39-67, the follow up manager notifies the transaction manager by sending an

e-mail, executing a script, or other defined actions).

Flores et al. also discloses stopping the system and preventing a user from

executing a business process (see column 98, lines 65-67). Flores et al. does not

explicitly disclose notifying a client of a status change so as to prevent the selected user

from executing the interdependent business process. However, it is old and well known

to stop a process from occurring if an error occurs on an interdependent process.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to disclose notifying a client of a status change to prevent a user from

executing the interdependent business process as it allows the process to be corrected

before interdependent processes execute and create errors.

Flores et al. do not disclose an abnormal status change. However, Reid et al.

(P.N. 5,892,449) disclose detecting an occurrence of an abnormal status change in one

of the plurality of related business processes (see column 6, lines 45-59, if the seven bit

code is abnormal then the status will result in an abnormal status change). It would be

obvious for Flores et al. to notify the client of an abnormal status change as Flores et al.

already disclose notifying the client of a status change. At the time of the invention it

would have been obvious for Flores et al. to notify the user of an abnormal (or

discontinuous) status change as the observer is informed of "the acts in the workflow"

and an abnormal status change occurs in the workflow processes. A status device is

used so that business processes in a workflow system may run smoothly and an

observer and others concerned with the workflow processes would use the status to

stay informed of any abnormalities. One of ordinary skill in the art would have been

motivated to include abnormal status changes as it allows the observer to more

accurately know what is occurring during the workflow processes.

(Amended) As per claim 2, Flores et al. disclose in the workflow control method

that status changes in the business process that are detected (see column 4, lines 57-

63, all status changes are detected and another action results from the trigger). Flores

do not disclose an abnormal status change in the business process that are detected

includes a discontinuance of the business processes. Reid et al. disclose an abnormal status change that is detected including a discontinuance of the business processes (see column 6, lines 46-59, if the seven bit code is abnormal then the status will result in an abnormal status change and the transmittance will be discontinued). It would be obvious for Flores et al. to have an abnormal status change detect a discontinuance as Flores et al. already disclose a status change. At the time of the invention it would have been obvious for Flores et al. to notify the user of an abnormal (or discontinuous) status change as the observer is informed of "the acts in the workflow" and an abnormal status change occurs in the workflow processes. A status device is used so that business processes in a workflow system may run smoothly and people concerned with the workflow process would use the status to stay informed of any abnormalities. One of ordinary skill in the art would have been motivated to include abnormal status changes as it allows the status signal to more accurately state what is occurring in the workflow processes.

(Amended) As per claim 4, Flores et al. disclose a workflow control method according to claim 1, wherein the selection of at least one user is carried by referring rules defining the relation between predetermined business procedures and related client computers (see column 8, lines 52-59, the workflow server is a type of workflow engine and it uses preset rules and procedures. It also selects the computers such as the STF processors and the transaction manager to execute the business processes).

(Twice Amended) As per claim 5, Flores et al. disclose a workflow system connected to

a plurality of client computer for executing business procedures including a plurality of

related business processes (see column 1, lines 12-22, and column 110, lines 26-33), at

least one of the business procedures being allowed to execute some of the related

business processes simultaneously (see column 2, lines 33-62, the business

procedures can execute in parallel, or simultaneously) comprising:

a status watcher for detecting a status change in a business process being

executed, including an occurrence of a status change in the business process (see

column 4, lines 30-34, and 54-63, and column 20, lines 42-47, the triggers change the

status of the workflow and the transaction manager initiates new workflow processes.

An observer is informed, or notified, of all acts occurring in the business process. The

observer therefore detects the type of change to the status);

a workflow engine connected to the status watcher, for controlling the execution

of each of the business procedures based on the status change detected by the status

watcher and the predetermined business procedure definitions (see column 4, lines 30

-34, the observer is a status watcher, the observer is informed, or detects, the acts of

the workflow, these workflow acts include status changes, also see column 4, lines 57-

63, the status changes are detected by the business processes using the triggered

action); and

a status watcher for detecting a status change in a business process being

executed, including an occurrence of a status change in the business process (see

column 4, lines 30-34, and 54-63, and column 20, lines 42-47, the triggers change the

status of the workflow and the transaction manager initiates new workflow processes.

An observer is informed, or notified, of all acts occurring in the business process. The

observer therefore detects the type of change to the status);

a notifier for notifying at least one of the client computer of the occurrence of the

stat change detected by the status watcher, when the user of the client computer ~~being~~

is in charge of a business process interdependent to a business process in which the

status change was detected, so as to prevent the user from executing the

interdependent business process (see column 4, lines 30-34, an observer is informed,

or notified, of all acts occurring in the business process, also see column 13, lines 39-6,

the follow up manager notifies the transaction manager by sending an e-mail, executing

a script, or other defined actions).

Flores et al. also discloses stopping the system and preventing a user from

executing a business process (see column 98, lines 65-67). Flores et al. does not

explicitly disclose notifying a client of a status change so as to prevent the selected user

from executing the interdependent business process. However, it is old and well known

to stop a process from occurring if an error occurs on an interdependent process.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to disclose notifying a client of a status change to prevent a user from

executing the interdependent business process as it allows the process to be corrected

before interdependent processes execute and create errors.

Flores et al. do not disclose a status watcher for detecting an occurrence of an

abnormal status change in the business process. However, Reid et al. (P.N. 5,892,449)

disclose detecting an occurrence of an abnormal status change in one of the plurality of

related business processes (see column 6, lines 45-59, if the seven bit code is

abnormal then the status will result in an abnormal status change). It would be obvious

for Flores et al. to detect an abnormal status change as Flores et al. already disclose a

status watcher. At the time of the invention it would have been obvious for Flores et al.

to have the status watcher detect an abnormal or discontinuous status change as the

observer is informed of "the acts in the workflow" and an abnormal status change

occurs in the workflow processes. A status device is used so that business processes

in a workflow system may run smoothly and an observer and others concerned with the

workflow process would want to use the status to stay informed of any abnormalities.

One of ordinary skill in the art would have been motivated to include abnormal status

changes as it allows the observer to more accurately know what is occurring in the

workflow processes.

        (Amended) As per claim 6, Flores et al. teach all disclose a status watcher (see

column 4, lines 30-34, the observer is a status watcher, the observer is informed, or

detects, the acts of the workflow, these workflow acts include status changes). Flores

et al. does not disclose detecting a discontinuance in the business process. However,

Reid et al. (P.N. 5,892,449) disclose detecting an occurrence of an abnormal status

change or discontinuance in a business process (see column 6, lines 46-59, if the

seven bit code is abnormal then the status will result in an abnormal status change and

the transmittance will be discontinued). It would be obvious for Flores et al. to detect

discontinuance or an abnormal status change as Flores et al. already disclose status

changes. At the time of the invention it would have been obvious for Flores et al. to

detect an abnormal or discontinuous status change as the observer is informed of "the

acts in the workflow" and an abnormal status change occurs in the workflow processes.

A status device is used so that business processes in a workflow system may run

smoothly and an observer and others concerned with the workflow process would want

to use the status to stay informed of any abnormalities. One of ordinary skill in the art

would have been motivated to include discontinuous or abnormal status detection as it

allows the observer to more accurately know what is occurring in the workflow

processes.

(Amended) As per claim 8, Flores et al. teach all the limitations of claim 7 and

Flores also disclose a resource selector for receiving an instruction and an identifier of

the business process on which the abnormal status change was detected from the

workflow engine, and selecting the client computer to be notified of said abnormal status

change by referring predetermined rules previously defining the relation between

predetermined business procedures and client computers thereby to designate the

client computer to said notifier (see in column 12, lines 26-34).

(Amended) As per claim 9, Flores et al. disclose a storage medium capable of

reading out stored information there from by a computer which stores programs for

realizing the workflow control method (see column 11, lines 31-67 and column 110

lines 63-64, the transaction database stores the information about the workflow control

method and can be read out by the transaction manager by way of the instantiator

module).

As per claim 10, Flores et al. disclose all the limitations of claim 8 and the

workflow system wherein the status watcher, the workflow engine, the notifier and the

resource selector are individual programs executed concurrently to control the

execution of each of the business procedures (see column 2, lines 33-62, the workflow

system is executed in parallel and therefore each of the business procedures can be

executed concurrently).

As per claim 11, Flores et al. disclose the workflow system according to claim 8,

further comprising a status watcher and for a user retrieval unit for displaying the status

change by the status watcher (see column 4, lines 30-34, and 45-47, the observer is a

type of status watcher, the performer must inherently use a user retrieval unit to

determine if a workflow is completed to satisfaction).

Flores et al. do not disclose handling abnormal status. Reid et al. teach creating

attributes to handle the abnormal status detected by the status watcher using an

exception handler unit (see column 6, lines 18-59, the bits are attributes describing the

status of the workflow, an abnormal or discontinuous status can be detected, an

exception handler unit is inherently used in order to determine that there is an error, or

abnormality, so that the controller can display an error message). It would be obvious

for Flores et al. to create attributes to handle the abnormal status detected by the status

watcher using an exception handler unit as Flores et al. already disclose a status

watcher. At the time of the invention it would have been obvious for Flores et al. to

create attributes for an abnormal (or discontinuous) status change as Flores et al.

already disclosed an observer that is informed of "the acts in the workflow. An

abnormal status change occurs within the workflow process and attributes would be

needed to create an abnormal status signal. A status device is used so that business

processes in a workflow system may run smoothly and an observer and others

concerned with the workflow process would want to use the status to stay informed of

any abnormalities. One of ordinary skill in the art would have been motivated create

attributes to handle the abnormal status detected by the status watcher using an

exception handler unit as it allows the observer to more accurately know what is

occurring in the workflow processes.

(Amended)   As per claim 12, Flores et al. disclose a workflow management system for

controlling an order of execution of business procedures each including a plurality of

related business processes and at least one business procedure being allowed to

execute some of the related business processes simultaneously (see column 2, line 33-

62, and figure 1, the parallel workflows allow the business procedures to be executed

simultaneously), said workflow management system comprising:

a client application to be executed by one or more client computers (see column

3, lines 31-37, and column 7, lines 31-44, a client application is executed on one or

more client computers);

a server application to be executed by a server computer for communicating with

the client application (see column 3, lines 31-37, the server application is executed by a

server computer and communicates with the client application);

an application database for storing data for the server application (see column 9,

lines 31-33, the administrator database stores data for the server application);

a status watcher for detecting a status change in a business process being

executed in the application database in a business process (see column 4, lines 30-34,

and 54-63, and column 20, lines 42-47, the triggers change the status of the workflow

and the transaction manager initiates new workflow processes, an observer is informed,

or notified, of all acts occurring in the business process, the observer therefore detects

the type of change to the status);

a workflow engine for controlling the execution of each of the business

procedures based on the status change detected by the status watcher and

predetermine business procedure definitions (see column 4, lines 30-34, the observer is

a status watcher, the observer is informed, or detects, the acts of the workflow, these

workflow acts include status changes and see column 4, lines 57-63, the status

changes are detected by the business processes using the triggered action).

a notifier for notifying the occurrence of a status change in the business process to at least one of the client computers, (see column 4, lines 30-34, an observer is informed, or notified, of all acts occurring during the business process).

Flores et al. also discloses stopping the system and preventing a user from executing a business process (see column 98, lines 65-67). Flores et al. does not explicitly disclose notifying a client of a status change when a user of the client computer is in charge of a business process interdependent to the business process in which the discontinuance was detected, so as to prevent the user from executing the interdependent business process. However, it is old and well known to stop a process from occurring if an error occurs on an interdependent process. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to disclose notifying a client of a status change to prevent a user from executing the interdependent business process as it allows the process to be corrected before interdependent processes execute and create errors.

Flores et al. does not disclose an abnormal status change. However, Reid et al (P.N. 5,892,449) disclose detecting an occurrence of an abnormal status change in one of the plurality of related business processes (see column 6, lines 46-59, if the seven bit code is abnormal then the status will result in an abnormal status change). It would be obvious for Flores et al. to notify the client of an abnormal status change as Flores et al. already disclose notifying the client of a status change. At the time of the invention it would have been obvious for Flores et al. to notify the user of an abnormal (or discontinuous) status change as the observer is informed of "the acts in the workflow"

and an abnormal status change occurs in the workflow processes. A status device is used so that business processes in a workflow system may run smoothly and an observer and others concerned with the workflow process would want to use the status to stay informed of any abnormalities. One of ordinary skill in the art would have been motivated to include abnormal status changes as it allows the observer to more accurately know what is occurring in the workflow processes.

As per claim 13, Flores et al. disclose the workflow management system with all the limitations cited in claim 12, further comprising a resource selector for receiving an instruction and an identifier of the business process on which the discontinuance was detected from the workflow engine, and selecting the client computer to be notified of the discontinuance by referring predetermining rules previously defining the relation between predetermining business procedures and client computers (see in column 12, lines 26-34).

As per claim 14, Flores et al. disclose the workflow management system according to claim 12, wherein the status watcher, the workflow engine, the notifier and the resource selector are individual programs executed concurrently to control the execution of each of the business procedures (see column 2, lines 33-62, the workflow system is executed in parallel and therefore each of the business procedures can be executed concurrently).

As per claim 15, Flores et al. disclose the workflow system according to claim 12, further comprising a status watcher and for a user retrevial unit for displaying the status change by the status watcher (see column 4, lines 30-34, and 45-47, the observer is a type of status watcher, the performer must inherently use a user retrieval unit to determine if a workflow is completed to satisfaction).

Flores et al. do not disclose handling abnormal status. Reid et al. teach creating attributes to handle the abnormal status detected by the status watcher using an exception handler unit (see column 6, lines 18-59, the bits are attributes describing the status of the workflow, an abnormal or discontinuous status can be detected, an exception handler unit is inherently used in order to determine that there is an error, or abnormality, so that the controller can display an error message). It would be obvious for Flores et al. to create attributes to handle the abnormal status detected by the status watcher using an exception handler unit as Flores et al. already disclose a status watcher. At the time of the invention it would have been obvious for Flores et al. to create attributes for an abnormal (or discontinuous) status change as Flores et al. already disclosed an observer that is informed of "the acts in the workflow" and abnormal status changes occur within the workflow process and attributes are needed to create an abnormal status signal. A status device is used so that business processes in a workflow system may run smoothly and an observer and others concerned with the workflow process =use the status to stay informed of any abnormalities. One of ordinary skill in the art would have been motivated create attributes to handle the abnormal status detected by the status watcher using an exception handler unit as it

allows the observer to more accurately know what is occurring in the workflow

processes.

As per claim 16, Flores et al. discloses the workflow management system

according to claim 15, wherein the user selection is made by referring to rules defining

the relationship between predetermined business procedures and client computers (see

column 2, lines 59-62, a workflow system uses a set of rules to define the relationship

between performers and customers as shown in the phases of the workflow).

As per claim 17, Flores et al. disclose a workflow management system

connected to a plurality of client computers for controlling an order of execution of

business procedures and at least one business procedure being allowed to execute

some of the related business processes simultaneously, said workflow management

system comprising:

Means for defining status changes to be detected in related business processes

which hare allowed to be executed simultaneously with each other by the client

computers (see column 2, lines 33-62, and column 4, lines 57-63, the status changes

are detected by the business processes using triggered actions, a plurality of the

business processes can be executed simultaneously with the parallel workflows);

A status watcher configured to detect a status change in a business proves being

executed, including a status change in a business process, among the related business

processes executed simultaneously (see column 4, lines 30-34, and 54-63, and column

20, lines 42-47, the triggers change the status of the workflow and the transaction manager initiates new workflow processes. An observer is informed, or notified, of all acts occurring in the business process. The observer therefore detects the type of change to the status);

A workflow engine configured to control the execution of each of the business procedures based on the status change detected by the status watcher and predetermined business procedure definitions (see column 4, lines 30 -34, the observer is a status watcher, the observer is informed, or detects, the acts of the workflow, these workflow acts include status changes, also see column 4, lines 57-63, the status changes are detected by the business processes using the triggered action); and

A notifier configured to notify the occurrence of a status change in the business process to at least one of the client computers, when a user of the client computer is in charge of a business process interdependent to the business process in which the status change was detected (see column 4, lines 30-34, an observer is informed, or notified, of all acts occurring in the business process, also see column 13, lines 39-6, the follow up manager notifies the transaction manager by sending an e-mail, executing a script, or other defined actions).

Flores et al. also discloses stopping the system and preventing a user from executing a business process (see column 98, lines 65-67). Flores et al. does not explicitly disclose notifying a client of a status change so as to prevent the selected user from executing the interdependent business process. However, it is old and well known to stop a process from occurring if an error occurs on an interdependent process.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to disclose notifying a client of a status change to prevent a user from

executing the interdependent business process as it allows the process to be corrected

before interdependent processes execute and create errors.

Flores et al. does not disclose detecting a discontinuance in the business

process. However, Reid et al. (P.N. 5,892,449) disclose detecting an occurrence of an

abnormal status change or discontinuance in a business process (see column 6, lines

46-59, if the seven bit code is abnormal then the status will result in an abnormal status

change and the transmittance will be discontinued). It would be obvious for Flores et al.

to detect discontinuance or an abnormal status change as Flores et al. already disclose

status changes. At the time of the invention it would have been obvious for Flores et al.

to detect an abnormal or discontinuous status change as the observer is informed of

"the acts in the workflow" and an abnormal status change occurs in the workflow

processes. A status device is used so that business processes in a workflow system

may run smoothly and an observer and others concerned with the workflow process

would want to use the status to stay informed of any abnormalities. One of ordinary skill

in the art would have been motivated to include discontinuous or abnormal status

detection as it allows the observer to more accurately know what is occurring in the

workflow processes.

As per claim 18, Flores et al. disclose the workflow system according to claim 17,

further comprising a resource selector configured to receive an instruction and an

identifier of the business process on which the discontinuance was detected from the

workflow engine, and select the client computer to be notified of the discontinuance by

referring predetermine rules previously defining the relation between predetermined

business procedures and client computers (see in column 12, lines 26-34).

As per claim 19, Flores et al. disclose the workflow management system

according to claim 18, wherein the status watcher, the workflow engine, the notifier and

the resource selector are individual programs executed concurrently to control the

execution of each of the business procedures (see column 2, lines 33-62, the workflow

system is executed in parallel and therefore each of the business procedures can be

executed concurrently).

As per claim 20, Flores et al. disclose the workflow management system

according to claim 17, further comprising

A user retrieval unit configured to select the user of the client computer who is in

charge of a business process interdependent to the business process in which the

status change was detected by the status watcher (see column 4, lines 30-34, and 45-

47, the observer is a type of status watcher, the performer must inherently use a user

retrieval unit to determine if a workflow is completed to satisfaction).

Flores et al. do not disclose handling a discontinuance. Reid et al. teach creating

attributes to handle an abnormal or discontinuance status detected by the status

watcher using an exception handler unit (see column 6, lines 18-59, the bits are

attributes describing the status of the workflow, an abnormal or discontinuous status can be detected, an exception handler unit is inherently used in order to determine that there is an error, or abnormality, so that the controller can display an error message). It would be obvious for Flores et al. to create attributes to handle the discontinuance status detected by the status watcher using an exception handler unit as Flores et al. already disclose a status watcher. At the time of the invention it would have been obvious for Flores et al. to create attributes for a discontinuous status change as Flores et al. already disclosed an observer that is informed of "the acts in the workflow. A discontinuance occurs within the workflow process and attributes would be needed to create a discontinuance status signal. A status device is used so that business processes in a workflow system may run smoothly and an observer and others concerned with the workflow process would want to use the status to stay informed of any abnormalities. One of ordinary skill in the art would have been motivated create attributes to handle the discontinuance detected by the status watcher using an exception handler unit as it allows the observer to more accurately know what is occurring in the workflow processes.

Response to Arguments

5.   The applicant argues that 1) Flores does not teach informing a user that one of

his tasks should be interrupted because its interdependent process has already been

discontinued; 2) Flores does not teach performing a plurality of business processes

simultaneously; 3) Flores and Reid does not teach detection of an abnormal status

change or "detecting an occurrence of an abnormal status change in one of the plurality

of business related processes"; 4) the combination of Flores and Reid does not teach

the claimed invention; and 5) Flores' "observer" does not correspond to applicants

"status watcher".

6.   In response to argument 1, Flores does not explicitly teach informing a user that

one of his tasks should be interrupted because its interdependent process has already

been discontinued. Flores does, however, teach notifying a client computer

corresponding to a selected user of the occurrence of a status change in the related

business process in column 4, lines 30-34, and column 13, lines 39-67. Flores also

discloses stopping the system and preventing a user from executing a business process

(see column 98, lines 65-67). However, it is old and well known to stop a process from

occurring if an error occurs on an interdependent process. Therefore, it would have

been obvious to one of ordinary skill in the art at the time of the invention to disclose

notifying a client of a status change to prevent a user from executing the interdependent

business process as it allows the process to be corrected before interdependent

processes execute and create errors.

In response to argument 2, Flores does teach performing a plurality of business

processes simultaneously. Flores discloses that processes are executed in parallel in

column 2, line 33-62, and in figure 1. The parallel workflows are workflows (or

processes) that are executed simultaneously. Therefore, there is no difference between

simultaneously executing workflows, or business processes as disclosed by the

applicant, and parallel workflows as disclosed by Flores et al. For example, if processes

1 and 2 are executed in parallel, it means that process 1 does not have to wait for

process 2 to begin or end in order for it to execute. Therefore, process 1 and 2 can be

executed simultaneously as taught by Flores.

In response to argument 3, Flores does not teach detection of an abnormal

status change. Flores does teaches detecting status changes and errors. However,

Reid et al., in column 6, lines 45-59, discloses detecting an occurrence of an abnormal

status change in one of the plurality of related business processes in column 6, lines 45-

59. Therefore, Flores and Reid together teach detection of an abnormal status change

in the workflow system as taught in claim 1.

In response to argument 4, the combination of Flores and Reid does teach the

claimed invention. Flores discloses a workflow system carrying out business procedures

comprising a plurality of related business processes. Flores further teaches processes

executed simultaneously and detecting and notifying a client of status changes in the

processes. Flores does not explicitly disclose that the status change is an abnormal status change or a result of a discontinuous status. However, Reid et al. does disclose "detecting an occurrence of an abnormal status change in one of the plurality of business related processes" in column 6, lines 45-59. Reid teaches that if the seven bit code is abnormal, then the status will result in an abnormal status change. Therefore, Reid teaches detecting an occurrence of an abnormal status (the 7 bits) in a business process. Reid teaches the missing element of Flores. Therefore combining Flores' status and status checker teach a discontinuous or abnormal status, as taught by Reid, discloses the invention as claimed by the applicant.

As per argument 5, Flores' "observer" does not correspond to applicants "status watcher". Flores discloses in column 4, lines 30-34, that the observer is informed, or detects, the acts of the workflow, these workflow acts include status changes. The status watcher detects changes in status of the workflow. Therefore the observer is a status watcher. Furthermore, in column 4, lines 57-63, and column 20, lines 42-47, the status changes are detected using the triggered action and an observer is informed, or notified, of all the acts occurring.

7.   The applicant further argues in response to the examiner's arguments in the non-

final rejection (page 13) that: 6) Flores does not teach "a plurality of related business

processes executed simultaneously" or "status changes to be detected in related

business processes which are allowed to be executed simultaneously with each other

by said client computers"; 7) Flores' parallel processing does not read on teaching

related business processes when an abnormality is detected in another one or related

business processes; 8) Flores does not teach that "an observer may be a client

computer or manager as they are 'selected users who are in charge of a business

process"; 9) Flores does not teach notification of the status; 10) Flores does not

disclose notifying a client of a change in status (abnormality) related to the business

process 11) Flores does not teach the control flow to be executed when abnormal

status change is detected in one of related business processes which are allowed to be

executed simultaneously with each other; and 12) there is no motivation to combine

Flores with Reid.

8.   As per argument 6, Flores does teach "a plurality of related business processes

executed simultaneously" and discloses "status changes to be detected in related

business processes which are allowed to be executed simultaneously with each other

by said client computers". By Flores disclosing the parallel workflows in column 2, lines

33-62, and in figure 1, Flores teaches that the processes are allowed to execute

simultaneously. As discussed in argument 2, the parallel workflows are workflows (or

processes) that are executed simultaneously. Furthermore, simultaneous processes

must be executed in parallel as they do not have to wait for a process to begin or end in order to execute.

As per argument 7, Flores' parallel processing does teach the claimed invention on related business processes detecting a status change. Various processes in a workflow are inherently related as the sequence of processes results in specific actions occurring. For example, the workflow must go through Serial 1 in order to reach Serial 2. There is no other way for Serial 2 to be reached. Therefore, Flores does show related workflow business processes occurring. As for an abnormality, Flores together with Reid, as taught above in argument 4, teach the detection of an abnormality in a business process.

As per argument 8, Flores does teach that "an observer may be a client computer or manager as they are selected users who are in charge of a business process". The observer is informed of the occurrences in the business process. Furthermore, Flores defines the observer to be a type of client notification and defines trigger to be an action in the workflow based on status causing another action to occur. The observer is informed of "the acts in the workflow". Therefore, the observer can be "in charge of a business process" as they are notified of the occurrence of any status changes in the workflow. Furthermore, the applicant does not explicitly define in the claims what "in charge of a business process" means as disclosed in claim 1. A person can be in charge of sometime if they are supervising the action. Being in charge of

something does not necessitate an action. Therefore, the observer, as they are notified

of all acts in the workflow, can and is in charge of the business process.

As per argument 9, Flores does teach that notification of the status occurs. The

follow-up manager notifies various transactions that need to occur. Furthermore, the

observer is also aware of the status of the processes. The follow-up manager knows

when to send the notification by the status of the transaction (an overdue commitment).

Without the status, the follow-up manager would not be able to notify the various

elements in the workflow system. Therefore, Flores does teach notification of the

status.

As per argument 10, Flores does not explicitly disclose notifying a client of a

change in status or abnormality related to the business process. As discussed in

argument 9, Flores teaches notification of a change in status. However, Flores does not

teach an abnormality (as previously discussed in argument 4). Reid teaches and

abnormality and Flores in combination with Reid teach the claim notifying a client of an

abnormality.

As per argument 11, Flores does not explicitly teach the control flow to be

executed when abnormal status change is detected in one of related business

processes which are allowed to be executed simultaneously with each other. However,

the idea of control flow is not explicitly mentioned in claim 1. The applicant does

discuss abnormal status changes in related business processes. The examiner has

responded to both of these arguments above in arguments 2, 4, and 6.

As per argument 12, it would be obvious for Flores et al. to notify the client of an

abnormal status change as Flores et al. already disclose notifying the client of a status

change. At the time of the invention it would have been obvious for Flores et al. to

notify the user of an abnormal (or discontinuous) status change as the observer is

informed of "the acts in the workflow" and an abnormal status change occurs in the

workflow processes. A status device is used so that business processes in a workflow

system may run smoothly and an observer and others concerned with the workflow

processes would use the status to stay informed of any abnormalities. One of ordinary

skill in the art would have been motivated to include abnormal status changes as it

allows the observer to more accurately know what is occurring during the workflow

processes.

In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Rebecca Bachner** whose telephone number is 703-

305-1872. The examiner can normally be reached on Monday - Friday from 8:30am to

5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, **Tariq Hafiz** can be reached on **(703) 305-9643**.

Any inquiry of a general nature or relating to the status of this application or

*proceeding should be directed to the **Receptionist** whose telephone number is **(703)***

***308-1113**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D.C. 20231

or faxed to:

(703) 305-7687   Official communications; including After Final

                     communications labeled "Box AF"

(703) 746-7306   Informal/Draft communications, labeled "PROPOSED" or "

                     DRAFT"

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal

Drive, Arlington, VA, 7th floor receptionist.

RMB
May 1, 2003

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600